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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,404	12/01/2000	Satoshi Nishikawa	862.C2066	1364

5514 7590 04/07/2005

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EXAMINER

QIN, YIXING

ART UNIT PAPER NUMBER

2622

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,404

Applicant(s)

NISHIKAWA, SATOSHI

Examiner

Yixing Qin

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-11 is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Response to Amendment

In response to applicant's amendment received 2/18/05, all requested changes have been entered. New claims 22-26 have been entered. Rejection under 35 USC 112 is withdrawn.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 17 and its dependent claims 18-21 are rejected under 35 U.S.C. 101 because the following claim format is unacceptable and subject to a 101 rejection:

"A computer program for performing the steps of ..."

Such a claim is non-statutory because the terminology "computer program" alone has no set definition. The following claim formats are acceptable and not subject to a 101 rejection:

"A computer program embodied in a computer readable medium for performing the steps of ..."

"A computer readable medium storing a program for performing the steps of..."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1, 2, 3, 4, 12,13,14,15, 17,18,19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima et al (U.S. Patent No. 6,104,498) in view of Telle (U.S. Patent No. 5,105,266).

1. **Claims 1, 12, and 22**

- **a converting step of converting...**
- Shima et al discloses in the abstract that their invention receives "...data containing print information input from a host computer..." (i.e. **a print command**) and has "...a print data analysis task for converting the format of the print information to prepare intermediate print information..."
- **a saving step of saving...**
- Also in the abstract, Shima et al discloses that their invention contains "memory means for storing the data and the intermediate print information..."
- In Fig. 8 and column 9, lines 18-21, Shima et al discloses M, "...wherein M is a number-of-copies register..." Although Shima et al does not explicitly teach the saving of the data and the number of copies in the same storage unit, it would have been obvious to one of ordinary skill in the art at the time of the invention to have stored the data and the number of copies together in one storage unit. The motivation is to save space with less storage units.

- **a discrimination step of discriminating...**
- Shima et al discloses in fig. 12 and column 13, lines 66-67 that “Whether or not test print is to be executed is determined at step S59.” The purpose of this step is to determine which of the two possible instructions (test print or “regular” print) is to take place.
- **a generating step of generating...**
- Shima et al discloses in Fig. 14 and column 14, lines 18-21, that “FIG. 14 show a flow for test printing of one copy at the beginning before M copies of P-page print information are printed.” Step S92 in Fig. 14 shows that the intermediate information is converted into an image (i.e. **generating** data) and printer.
- Claim 22 essentially divides this limitation into two limitations (the 4th and 6th limitations of claim 22). Column 14, lines 7-10 discloses that the “print management task” is the means in which intermediate data is converted into print data.
- **an output step of outputting...**
- Again, from step S92, one can see that the image is printed.
- **a re-generating step of re-generating...**
- Although Shima et al discloses the concept of test printing, it does not explicitly teach the idea of a re-generation of data when an instruction is inputted.

- However, the secondary reference, Telle, discloses in column 1, lines 58-61 that the object of his invention is able to replace colors in an image in a single scan of the image.
- In addition, column 5, lines 66-68 and column 6, lines 1-15, that an image buffer stores “unmodified/original image data.” (i.e. **intermediate** data – since it is the data that was scanned in and stored in a buffer). Column 6, lines 10-15, especially, discloses that test printing can be performed and adjustments can be made from the original image data. Column 3, lines 41-48 discloses a variety of functions that could be used to modify the image to be printed.
- Furthermore, column 6, lines 16-21 discloses that color image data is acted upon in accordance with instructions given by the operator. This would qualify as “**re-generating**” because one would understand that printing an image with different colors requires the original image data to be modified. Since the original image is stored in a buffer and only scanned one time, data regeneration occurs in the printer.
- Both the Shima et al and the Telle references are in the art of test printing through the use of intermediate data that eliminates the need for re-transmission of print data. This will serve as the motivation for the combination of these two references from here on. Therefore, it would be have been obvious to one of ordinary skill in the art at the time of the invention to combine the concept of being able to change print instructions

without having to re-scan data as disclosed by Telle into the image forming apparatus as disclosed by Shima et al. The motivation would be to allow adjustments to the image to be printed without having to re-transmit data.

- Also, please note that in the Shima et al reference, in Fig. 15A and in column 14, lines 40-54, Shima et al discloses that intermediate information may be left in the memory without having the need to be deleted after printing is done.

2. Claims 2, 13, and 23

- **a delete step of deleting...**
- Shima et al discloses in fig. 9 and column 10, lines 1-3, that "If the number of copies is reached, all information read from the storage means and printed is deleted from the storage means at step S39."

3. Claims 3, 14, and 24

- **a step of decreasing...**
- Shima et al discloses in fig. 13 and column 14, lines 13-15, that "If the test print is OK, print of the second page to the Pth page is executed at steps S74-S77. Next, the remaining (M-1) copies are printed at steps S78-S83." The M that Shima et al refers to a register that keeps track of the number of copies the job has. The point is that Shima et al is reducing the number of copies left to print since the test copy can simply be used as one of the copies that is needed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to only print the remaining copies of the total number of copies if the test copy is deemed to be OK. The motivation is to save paper when printing.

4. Claims 4, 15, and 25

- **a change step of changing...**
- The Shima et al reference deals mainly with test copying and does not explicitly disclose the changing of output appearances. However, in the rejection to the last limitation of claim 1 above, the secondary reference, Telle, discloses that there are many changes that could be made to the **output appearance** by an operator after test printing occurs. The motivation would be to allow an operator to adjust printing options.

II. Claims 5, 16, 21, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima et al (U.S. Patent No. 6,104,498) and in view of Telle (U.S. Patent No. 5,105,266) and further in view of Williams et al (U.S. Patent No. 5,237,923).

5. Claims 5, 16, and 26

- **a step of resetting the number of copies...**

- Shima et al reference discloses all the limitations of claim 5 except for "...the step of resetting the number of copies..."
- Shima et al does not disclose the changing of output appearances and the resetting of the number of test prints to print. However, the secondary reference, Telle discloses a variety of changes can be made to affect the output appearance of an image (see the rejection to the last limitation of claim 1). Neither Shima et al nor Telle discloses the resetting of copies when output appearance change.
- However, the tertiary reference by Williams et al teaches in column 8, lines 61-68 and column 9 line 3, the printing of "proof copies of the original document, the number being determined by the operator's instructions entered via keyboard..." and when "...acceptable, the operator can instruct the press to print the required number of final copies." Also, Williams et al takes into account that "[i]f changes are required, new printing plates can be made..." Williams et al's reference accounts for changes in "proof" (test) copies and the ability to change the number of copies to any value based on user input. The user can simply indicate to print a number of test copies, change a setup of the output appearance (as taught by Telle) and indicated to print the same number of copies again of the "new" image – which effectively is resetting the number of copies.
- All three references are in the art of printing images and have the capabilities to perform test/proof printing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Telle's invention's ability to change output appearance with Williams et al's number of copies setting

method and with Shima et al's test printing method. The motivation would be that an appropriate number of test copies would be printed.

Response to Arguments

Applicant's arguments, with respect to the rejection(s) of claim(s) 1-26 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Telle (U.S. Patent No. 5,105,266).

In response to the arguments made regarding the "re-generating" step, the examiner agrees that neither Shima et al nor Williams et al teaches that concept. However, new art has been found (Telle – U.S. Patent No. 5,105,266) that teaches the concept of re-generating data when an operating instruction is inputted after a test print is performed. Sufficient memory is also provided as Telle discloses in column 5, lines 67-68, that the buffer is a full page image buffer. Please also see the rejection to the 6th limitation of claim 1 above, with a more detailed explanation of Telle's invention.

The examiner also acknowledges that the limitations of claim 1 is not all disclosed in Williams et al, but notes that Williams et al was not used in the rejection to claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571)272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YQ


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